

9/30/03

Approved for use through 10/31/2002. OMB 0651-003  
U.S. Patent & Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Action of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB number.

Substitute for form MPEP/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> (Use as many sheets necessary)		<b>COMPLETE IF KNOWN</b>	
		Application Number	Not Yet Assigned <b>10/675481</b>
		Filing Date	Not Yet Assigned
		First Named Inventor	Freitag
		Group Art Unit	Not Yet Assigned
		Examiner Name	Not Yet Assigned
SHEET 1	OF 1	DocId Number	HSJ9-2003-0071US1

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>a</sup>	Cite No. <sup>1</sup>	U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number	Kind Code <sup>2</sup> (if known)			
AH	✓	US 2002/0181173	A1	Nagai	12-05-2002	
		US 2002/0085322	A1	Pinarbas	07-04-2002	
		5,701,223	A1	Fontana Jr. et al.	12-23-1997	
		6,535,382	B2	Kawawake et al.	03-18-2003	
		US 2003/0035255	A1	Hasegawa et al.	02-20-2003	
		6,493,275	B2	Kamiguchi et al.	12-17-2002	
		6,353,519	B2	Pinarbas	02-05-2002 <b>03/2002</b>	
		6,348,274	B1	Kamiguchi et al.	02-19-2002	
		US 2001/0040781	A1	Tanaka et al.	11-15-2001	
		6,282,068	B1	Pinarbas	08-28-2001	
		6,134,050		Mao et al.	10-17-2000	
		5,880,913		Gil	03-09-1999	
	5,432,734		Kawano et al.	07-11-1995		

FOREIGN PATENT DOCUMENTS								
Examiner Initials <sup>a</sup>	Cite No. <sup>1</sup>	Foreign Patent Document			Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
		Office <sup>4</sup>	Number <sup>4</sup>	Kind Code <sup>5</sup> (if known)				
AH	✓		WO 02/077657	A1	Hong et al.	10-03-2002		

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS					
Examiner Initials <sup>a</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published			T <sup>3</sup>
AH	✓	EGELHOFF Jr. et al., Oxygen as a Surfactant in the Growth of Giant Magnetoresistance Spin Valves, Journal of Applied Physics, 15 December 1997, 6142-6151, 82-12			
S	✓	SAKAKIMA et al., Enhanced GMR in PGM-Based Spin Valves with Specular Reflective Thin Oxide Layers, IEEE Transactions on Magnetics, September 2000, 2554-2556, 36-5, Kyoto, Japan			
Si	✓	Wang et al., Specularity in GMR Spin Valves and In Situ Electrical and Magnetotransport Measurements, IEEE Transactions on Magnetics, September 2000, 2841-2846, 36-5, Kyoto, Japan			

Examiner Signature	<b>A. Heinz</b>	Date Considered	<b>12/7/05</b>
--------------------	-----------------	-----------------	----------------

<sup>1</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>2</sup>Unique citation designation number. <sup>3</sup>See attached Kinds of U.S. Patent Documents. <sup>4</sup>Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). <sup>5</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>6</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. <sup>7</sup>Applicant is to place a check mark here if English language translation is attached.